

DEPARTMENT OF THE NAVY

U.S. NAVAL SUPPORT ACTIVITY
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NAVSUPPACT NAPLES INST 11260.1

\$ 2 AUG 2004

NAVSUPPACT NAPLES INSTRUCTION 11260.1

From: Commanding Officer, U.S. Naval Support Activity, Naples, Italy

Subj: MANAGEMENT OF WEIGHT HANDLING EQUIPMENT (WHE) PROGRAM

Ref:

- (a) NAVFAC P-307, Management of Weight Handling Equipment
- (b) NAVFAC P-300, Management of Civil Engineering Support
- (c) SECNAVINST 11260.2, Navy Weight Handling Program for Shore Activities
- (d) NAVFACINST 11450.1A, Management of Weight Handling Equipment
- (e) OPNAVINST 5100.23F

Encl:

- (1) Operator's Monthly Check List for CAT 3 Cranes
- (2) Rigging Gear Inventory Form
- (3) Certificate of Compliance
- 1. <u>Purpose</u>. To publish responsibilities regarding the management of the WHE program. This instruction is not to be used as a reference for proper principles or practices of rigging or crane operations, but rather to assign the roles and responsibilities as required by reference (a).
- Background. Reference (a) prescribes mandatory requirements 2. associated with WHE maintenance, certification, alteration, operator licensing, operator qualification and testing, operator inspections, operational safety, investigation and reporting of accidents, rigging gear, and essential documentation. (b) prescribes testing requirements for equipment that is not considered WHE, such as aerial servicing platforms, trucks, and other types of aerial apparatus. Reference (c) provides for the establishment of safe and effective WHE programs and assigns overall responsibility for the direction and oversight on all matters pertaining to the Navy's WHE programs at shore activities to the Commander, Naval Facilities Engineering Command (NAVFACENGCOM). Reference (c) also sets requirements for WHE program self-assessment at prescribed intervals and also establishes authority and assigns responsibility for the acquisition and management of WHE under the technical cognizance

of NAVFACENGCOM. Safe operation of WHE can only be achieved if compliance with references (a) through (c) is strictly observed. Proper maintenance, inspection, testing and certification, training, and operation are essential to this end.

3. <u>Scope</u>. This instruction applies to all activities, departments, and tenant commands supported by U.S. Naval Support Activity (NAVSUPPACT), Naples, Italy, and contractors who perform functions in support of NAVSUPPACT Naples property.

4. Definitions

- a. WHE is any crane that meets the definition of Category 1 through Category 4, as set forth below:
- (1) Category 1 (CAT 1) Cranes. Includes cranes designated as portal, hammerhead, mobile truck (except CAT 4), locomotive, cruiser, crawler, stiff leg, aircraft crash, derrick, floating, tower, and container.
- (2) Category 2 (CAT 2) Cranes. Includes cranes with a rated capacity of 20,000 pounds and over designated as overhead traveling, gantry, cantilever gantry, semi gantry, pillar jib, jib, pillar, monorail, fixed hoist, and wall. Chain falls and hoists not permanently fixed to a structure are excluded.
- (3) Category 3 (CAT 3) Cranes. Includes cranes with a rated capacity under 20,000 pounds designated as overhead traveling, gantry, cantilever gantry, semi gantry, pillar jib, jib, pillar, monorail, fixed hoist, fixed chain fall, and wall. Chain falls and hoists not permanently fixed to a structure are excluded.
- (4) Category 4 (CAT 4) Cranes. Includes commercial truck mounted cranes, truck mounted articulating boom cranes, pedestal mounted commercial boom assemblies (fixed length, telescoping articulating types) attached to stake trucks, trailers, flatbed railcars, etc.
- b. Rigging Gear. Includes the following equipment used in crane and rigging operations:

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- (1) Slings, associated attachments, and connectors: Slings, chain, wire rope, metal mesh, synthetic rope, synthetic webbing, synthetic round slings, shackles, eyebolts, swivel hoist rings, links and rings, turnbuckles, etc.
- (2) Portable load indicators: Dynamometers, load cells, crane scales, etc.
- (3) Portable falls and hoists: Chain falls, block and tackle, etc.
- (4) Other portable lifting devices: Portable gantries, A-frames, floor cranes, strong backs, spreader bars, or devices that directly support larger equipment.
- c. Load Bearing Parts. Those parts of the WHE that support the load and upon failure could cause dropping, uncontrolled shifting, or uncontrolled movement of the load.
- d. Load Controlling Parts. Those parts that position, restrain, or control the movements of the load (e.g. brakes, clutches, switches, crane mounted diesel engines, generators, electrical power distribution systems, etc.) in which a malfunction could cause dropping, uncontrolled shifting, or uncontrolled movement of the load.

e. Safety Devices

- (1) Operational Safety Devices. Safety devices which affect the safe load lifting and handling capability of the equipment, such as interlocks, limit switches, overload indicators with shutdown capability, emergency stop switches, radius indicating devices, and locking devices.
- (2) General Safety Devices. General safety devices are those devices that provide protection for operation and maintenance personnel and equipment on or in the operating path of cranes, such as bells, horns, warning lights, and bumpers.
- f. Major Maintenance/Mechanical Deficiencies. A major deficiency affects a load bearing or load controlling part, or an operational safety device that hinders the safe operation, or reduces the load bearing or load controlling capability of the equipment or component.

- g. Operating Envelope. For the purpose of this instruction, it is assumed there is an operating envelope around any crane, and inside the envelope are the following six elements:
 - (1) The crane
 - (2) The operator
 - (3) The riggers and crane walker
 - (4) The rigging gear between the hook and load
 - (5) The load
- (6) The crane's supporting structure (ground, rail, connections)
- h. Accidents. An accident occurs when any of the six elements in the operating envelope fails to perform correctly during operation, including operation during maintenance or testing, which results in the following:
 - (1) Personnel injury or death
 - (2) Material or equipment damage
 - (3) Dropped load
 - (4) Derailment
 - (5) Two-blocking
 - (6) Overload
- (7) Collision, including unplanned contact between load, crane, and/or other objects

5. Responsibilities

- a. Crane Program Manager/Certifying Official will:
- $\hspace{0.1in}$ (1) Ensure compliance with this instruction and reference (a).

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- (2) Maintain and update this instruction to include any new requirements or any other applicable changes.
- (3) Ensure that WHE self-assessments are conducted per reference (d).
- (4) Coordinate responses to all audit findings and ensure that findings are closed and/or implemented.
- (5) Review and approve procurement of WHE and ensure all appropriate parties participate in the review process.
- (6) Conduct periodic walk-through inspections at work centers to observe crane and rigging operations to ensure safe operations and proper use of equipment. If discrepancies are found, the Certifying Official will notify the work center supervisor in writing of the discrepancy and require it to be corrected. The Certifying Official may initiate necessary standdowns based on the discrepancy.
- (7) Know the Test Director's WHE certification process, including the proper content of certification packages and the proper procedures to certify WHE.
- (8) Not sign certification documentation for WHE that has any major deficiency. If a major deficiency is suspected, the Certifying Official will seek proper guidance to resolve the issue prior to signing the documentation.
- (9) Retain current letter of designation for primary and alternate Certifying Official(s), signed by the Commanding Officer.
- (10) Maintain current letter of designation for the Test Director and Condition Inspectors signed by the Certifying Official.
- (11) Chair the WHE Program Self Audit Board at prescribed intervals per reference (d). Provide proper documentation to the Navy Crane Center (NCC) following self-assessments.

b. Test Director will:

(1) Per reference (a), schedule, direct, and conduct required load testing and certification, and applicable component

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certifications of all CAT 1 through CAT 4 cranes. This includes inspection of all maintenance and repairs performed on load bearing and load controlling components, and annual inspections and testing. Ensure all repaired or replaced parts do not constitute crane alteration.

- (2) Provide the Certifying Official accurate and complete certification packages for signature, and familiarize the Certifying Official of the content of the certification package. Packages will be annotated with any minor deficiencies that are to be deferred. Under no circumstances will a certification package be created or presented to the Certifying Official that has any deficiency rendering it non-certifiable with all references.
- (3) Ensure all effected parties are notified of crane certification expiration dates. Coordinate annual maintenance and certification schedules based on customer input, while ensuring requirements contained in reference (a) are met.
- (4) Maintain a summary of all deferred minor deficiencies for CAT 1 through CAT 4 cranes, and ensure the deficiencies are corrected in a timely manner.
- (5) Serve as lead for all alteration/modification processes for cranes per reference (a). In conjunction with the Certifying Official, determine when coordination with Public Works Divisions, tenant commands, and/or NCC is applicable based on the criteria set forth in reference (a). Summarize and document this determination and insert it in the respective Equipment History File (EHF). Coordinate with Public Works Department (PWD) Maintenance Division, tenant commands, and/or NCC to establish a plan of action and lead the coordination efforts.
- (6) Review Operator Daily Check Lists (ODCL), work orders, and inspection reports in an audit capacity and notify the Transportation Manager and/or Maintenance Shop Supervisor of the need for corrective action.
- (7) Coordinate, submit, and maintain a log of all reportable deficiencies to NCC per reference (a).
- (8) Participate as a member on the WHE Program Self-Assessment Team.

- (9) Upon notification of an accident or incident involving WHE in the scope of this instruction, conduct an immediate investigation into the circumstances; if NAVSUPPACT Naples property, prepare and complete the documentation outline in reference (a); if tenant-command property, offer assistance as a subject matter expert in the investigation and report preparation process.
- (10) Properly dispose of all rigging gear that is beyond repair or is deemed no longer viable for useful service. Remove destroyed pieces of gear from inventory records.
- (11) Retain the current letter of designation as Test Director signed by the Certifying Official.
- (12) Coordinate responses and track the completion and/or implementation of NCC Crane Safety Advisories (CSA) and Equipment Deficiency Memoranda (EDM). Provide necessary CSA/EDM responses to the NCC within 30 days from the date of receipt. Proper records will be maintained and include:
 - (a) A copy of each CSA/EDM in its entirety.
- (b) Verify the applicability and implementation of the CSA/EDM received from NCC and add to the specific historical EHF for which is applies.
 - (c) Copies of any responses provided to NCC.
- (13) Establish and maintain procedures to facilitate crane operation and/or training. Training will include written safety courses, written basic knowledge courses, practical examinations, or refresher training as appropriate. Coordination of the physical qualification examination is the responsibility of the crane operator supervisor.
- (14) Facilitate initial training for CAT 3 crane operators and riggers. Curriculum will include proper operation of CAT 3 cranes to include basic rigging principles and operational practices regarding crane usage.
 - c. WHE Inspectors will:

- (1) In collaboration with the Test Director, manage and coordinate all WHE inspections, maintenance, repair efforts, and generate schedules for annual maintenance and certification.
- (2) Provide the customer all applicable certification expiration dates, and ensure cranes are scheduled for preventive maintenance so that all work is completed prior to current certification expiration.
- (3) Schedule routine and emergency repairs with input from customers and the Test Director.
- (4) Provide the Test Director yearly maintenance and inspection plans that comply with reference (a) and original equipment manufacture's recommendations, if available.
- (5) Forward pertinent reports, documentation, and other correspondence to the Test Director in order to certify cranes.

Ensure that all documentation is prepared per reference (a). Inspectors shall ensure all replaced or repaired parts are clearly annotated on applicable documents and brought to the attention of the Test Director. Implement action to ensure all maintenance criteria are met and documentation is complete and accurate when forwarded to the Test Director.

- (6) Participate as a member of the WHE Self-assessment Team.
- (7) Respond to service calls regarding CAT 1 through CAT 4 crane deficiencies and ensure applicable corrective actions and necessary lockout/tag-out procedures are executed, if required.
- (8) Per reference (a), perform condition inspections for CAT 1 through CAT 4 cranes.
- (9) Review ODCLs and initiate Shop Repair Orders (SRO) based on pertinent comments or discrepancies. Upon completion of the Test Director's review, file ODCLs in the EHF.
- (10) Review work orders when complete, checking for accuracy of information and completion of maintenance criteria. Pertinent documentation will be included with the completed work orders and certification (if applicable), and filing in the EHF.

- (11) Schedule operators, riggers, and Test Director for load testing of CAT I through CAT 4 cranes.
- (12) Notify the Certifying Official and Test Director of all unplanned overloads, repairs, replacements, and adjustments to load bearing and load controlling items immediately.
- (13) Administer and maintain a Lockout/Tag-Out program for CAT 1 through CAT 4 cranes per reference (e) and locally developed standard operating procedures.
- (14) Maintain a database of each piece of NAVSUPPACT Naples and tenant command-owned general-purpose WHE rigging gear. Documentation must include a unique serial number, rated load, and visual inspection expiration date for each piece of rigging gear. General-purpose WHE rigging rear does not include specialized gear designed to handle ordnance or aircraft components governed by regulations other than reference (a).
- (15) Ensure that PWD rigging gear has appropriate certification documents. If documentation is not available to use, ensure that a load test and visual inspection are performed. Label each piece of PWD WHE rigging gear to clearly show a unique serial number, rated load, and certification (visual inspection expiration date).
- (16) Perform periodic visual inspections or testing on applicable rigging gear at the proper intervals, per reference (a). Maintain complete and accurate records of these inspections or tests. Be familiar with inspection, rejection, and use criteria for each piece of rigging gear per reference (a). Remove from service any piece of rigging gear that does not pass visual inspection.
- (17) Monitor rigging gear inventories maintained by WHE work center supervisors to ensure accuracy.
- (18) Properly dispose of all rigging gear that is beyond repair or is deemed no longer viable for useful service. This should be accomplished in conjunction with the Test Director. Remove destroyed pieces of gear from inventory records per governing quidance.

(19) Ensure all wire rope procured has proper certification documentation. File wire rope certification documents in the appropriate EHF.

d. PWD Transportation will:

- (1) Provide maintenance support during loading testing operations in conformance with the load test schedule.
- (2) Assign WHE Inspectors for NAVSUPPACT Naples owned WHE and rigging gear.
- (3) Conduct WHE/rigging gear inspections in accordance with references (a) through (e). Maintain independent copies of inspection logs in addition to providing copies to the WHE Certifying Official.
- (4) Schedule WHE Inspectors for training and maintain independent training records in addition to providing certificates to the WHE Certifying Official.

e. NAVSUPPACT Naples Safety Office will:

- (1) If requested by the Certifying Official, (convene and chair) a WHE Accident Review Board to investigate accidents or incidents per reference (a). The Safety Office will assemble all representatives deemed appropriate for the incident/accident investigation, but at a minimum the board should include:
 - (a) Safety Representative
 - (b) Certifying Official
 - (c) Test Director
 - (d) WHE Inspector
 - (e) Customer WHE Representative
- (2) At the discretion of the Certifying Official, participate on the annual WHE Self-Assessment Team.
- f. Work Center Supervisors that utilize CAT 1 through CAT 4 Cranes will:

- (1) Accept full responsibility for all crane and rigging operations performed using WHE and rigging gear assigned to their work centers. Supervisors will ensure that safe crane and rigging practices are being used and will report any deficiency noted bythe crane operators or riggers to the Certifying Official, or his representative. Cranes that have a major maintenance or mechanical deficiency will be removed from service immediately.
- (2) Review ODCLs for CAT 1, 2, and 4 cranes for completion and retain for a period of 60 days. Ensure all CAT 3 crane preuse checklists (enclosure (1)) are prepared and posted at respective cranes and crane operators conduct pre-use visual inspection prior to use. Enclosure (1) must also be completed on a monthly basis and retained by the work center supervisor for a period of 60 days. Work center personnel must forward enclosure (1) to their work center supervisor by the fifth day of each month. Minor deficiencies noted must be reported to the WHE Test Director. Immediate notification to the Certifying Official is required if a major deficiency is discovered.
- (3) Ensure all CAT 1, 2, 4, and cab operated CAT 3 crane operators have valid licenses for the individual cranes being operated.
- (4) Ensure all non-cab operated CAT 3 crane operators received operator training administered by PWD or appropriate training authority. Work center supervisors are responsible for ensuring all operators are trained and have knowledge of the crane they are to operate.
- (5) Ensure all personnel operating CAT 3 cranes, who perform rigging tasks, are properly trained and are performing pre-use inspections of rigging gear per reference (a).
- (6) In the event of an accident, notify the PWD Certifying Official and the Base Safety Office immediately.
- (7) Maintain an accurate inventory of all WHE rigging gear within the work center. For general-purpose rigging gear, enclosure (2) must be used to log inventory data. Enclosure (2) must also be forwarded to the Certifying Official on an annual basis (January 1) or when the inventory is amended (rigging gear is added or deleted).

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- (8) Ensure all pieces of WHE general-purpose rigging gear are properly tagged with a readable unique serial number, rated load, and visual inspection expiration date. Ensure that no piece of gear is used that is out of certification or does not have the proper tag affixed. If any gear is found in the above condition, the gear shall be removed from service.
- (9) Ensure that WHE rigging gear has appropriate certification documents. If documentation is not available prior to use, ensure that a load test and visual inspection are performed.
 - (10) Ensure rigging gear is properly stowed after use.
- (11) Ensure that any crane tagged or locked out is not used. If any tagged crane is used, notify the Certifying Official, Test Director, or Safety Office immediately.
- (12) Ensure no alterations or disassembly of any aspect or part of a crane or the hook assembly are performed. If any alteration or disassembly is suspected or confirmed, the crane will be placed out of service and the Certifying Official or Test Director will be notified immediately.
- (13) Perform all crane and rigging operations in a safe and proper manner.
 - g. Operators of any crane will:
- (1) Ensure safe crane operating and rigging practices are employed by all riggers during an operational lift.
- (2) Exercise skillful judgment during crane and rigging operations. Never engage in unsafe crane operation.
- (3) Advise supervisors immediately if any crane or rigging gear deficiency is detected.
- (4) Secure the crane from operation immediately upon detection of a major deficiency (deficiency to a load bearing, load controlling, or operational safety device) or upon observing an operating condition which could result in uncontrolled movement, failure to move as expected from control input, or

otherwise renders the crane unsafe. Advise the supervisor immediately after the crane is secured.

- (5) Perform all required ODCL/Operator's monthly Checklist inspections.
 - h. Contracting Officers will:
- (1) Ensure all contractor-owned and -operated cranes meet provisions regarding crane maintenance and certification, operator training and licensing, rigging gear use, crane operation pre-inspection, and all safety requirements and terms relating to Italian law.
- (2) Comply with investigation and reporting of WHE requirements as outlined in reference (a).
- (3) Ensure that contractor personnel who operate Navyowned WHE meet all licensing requirements contained in reference (a).
- (4) Ensure compliance of all requirements contained in reference (a) that relate to contractor-owned and -operated cranes.
- (5) Ensure the following requirements are met before any contractor-owned cranes are used at a NAVSUPPACT Naples Contractor managed project site:
- (a) Require contractors to comply with all crane safety and operations of this instruction and operations and to notify the Contracting Officer 15 days in advance of any cranes entering the activity.
- (b) Notify Air Operations staff sufficiently in advance to coordinate clearance of contractor cranes with the local airport authorities.
- (c) Require contractors to certify that the crane and rigging gear conform to the appropriate Italian safety standards. Require contractors to certify that the crane operator is qualified and trained for the operation of the crane to be used and provide copies of both certifications two days in advance of any crane entering the activity. Enclosure (3) must be completed

and posted in each contractor-owned and -operated crane used on NAVSUPPACT Naples facilities. The certifications will be posted on the crane and the contractor will provide a copy of the certificate on the first day the crane is used on the project.

- (d) Require contractors to provide a critical lift plan as required by the U.S. Army Corps of Engineers, Safety Manual, EM 385-1-1.
- (e) Require contractors to provide the Contracting Officer, within 24 hours after any accident, a weight handling equipment accident report using the form provided by the Contracting Officer, consisting of a summary of circumstances, explanation of cause(s), photographs, and corrective actions taken. The contractor will notify the Contracting Officer as soon as practical, but no later than four hours, after an accident involving a fatality, in-patient hospitalization, overturned crane, collapsed boom, or any other major damage to the crane or adjacent property. The contractor will secure the accident site and protect evidence until released by the Contracting Officer. The contractor will be required to conduct an accident investigation to establish the root cause(s) of the accident. Crane operations will not proceed after an accident until the cause is determined and corrective actions have been implemented to the satisfaction of the Contracting Officer.

6. <u>Action</u>. All departments and tenant activities operating WHE will comply with this instruction.

D. J. FREDERICK

Distribution:
NAVSUPPACT NAPLES INST 5216.4X
Lists I and IV

OPERATOR'S MON	THLY CHECKLIST FO	OR CAT 3 CRANES (record a	nd retair	1)						
Daily Pre-Use Ir	spection (perform visua		ch operat	tion)							
Crane Number Type	Location or Assig	nment Date:									
Time crane was used	Hours Operated										
Start time Stop ti		Operator (Name)									
Legend: "S" = Satisfactory, "U"=Unsatisfact	ory	·····	S	U	Remarks						
WALK AROUND INSPECTION											
Controller/pendant *			1								
Rail path structure *											
General hardware Block and hook *											
Walkways ladders-handrails											
			 								
Load chair *(If Applicable) Sheeves *											
Wire rope & reeving *(If Applicable)											
Rail stops *											
Certification papers (attached to crane) *											
Certification expiration date (certification is current) *											
OPERATOR INSPECTION											
Operating area is clean and absent of safety hazards											
Controller action *											
Brakes (hc ist, trolley, bridge) *											
Crane stability *											
Limit switch(s) *											
No load test *			 								
Leaks (oil) *											
Warning devices *			 								
		1	-4/4	4 41	d						
*If a check list item marked with an asterisk is unsatisfactory, suspend operations and lockout/tag-out the crane and contact the Load											
Test Director at 626-3930 or the WHE Director at 626-6691 or the Trouble Call Desk at 626-4981.											
REMARKS:											
	•										
Instructions											
1. Immediately report all items not effecting crane integrity (not marked with an asterisk) to the work center supervisor											
prior to commencing crane operations.											
2. Never overload the hoist.											
3. Avoid sudden direction inversions; do not prolong the use of successive impulses that overheat electric motors.											
4. Before leaving the operation area; ensure loads are r											
5. On a mon'hly basis, complete this form and forward to the work center supervisor.											
Operator's Signature	Work Center Sup	ervisor's Signature			Date						
					<u> </u>						

Weight Handling Equipment Program NSA Naples, Italy RIGGING GEAR INVENTORY FORM

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date:

				 				 				 			 	 	 _	 	_
Comments																			
Factory Certif. or Pull tested on																			
Visual Sling Insp. Date																			
Sling Description																			
Rated Basket SWL				:															
Rated Choker SWL																			
Rated Vertical SWL																			
Unique Serial Number																			

Enclosure (2)

Naval Support Activity Naples, Italy

Certification of Weight Handling Equipment

Crane #____ is hereby certified as being in compliance with NSA Naples Instruction 11260.1

Command Point of Contact:	
Listed Operator:	
Maintenance Inspection Date:	
Successful Load Testing Date:	
NSA Program Certifier	Date

This certification is effective for one calendar year or until such time as the listed equipment is modified, loaded in excess of its listed maximum, or otherwise requires re-certification in accordance with NSA Naples Instruction 11260.1 before the scheduled renewal date.